

What is claimed:

1. A method of redirecting messages from a message server to a plurality of mobile data communication devices, comprising the steps of:

5 receiving a plurality of messages at the message server;
providing a redirection program at the message server;
providing a plurality of desktop systems in communication with the message server via a network;
providing a user profile for each of the plurality of desktop systems at the message server, wherein the user profiles each associate a particular desktop system with a particular mobile data communication device;
10 configuring the desktop systems to detect one or more redirection events;
detecting the redirection events at the desktop systems;
transmitting redirection triggers from the desktop systems to the message server; and
15 in response to the redirection triggers, continuously redirecting the messages from the message server to the mobile data communication devices based on the user profiles.

2. The method of claim 1, further comprising the steps of:

20 receiving the messages at the mobile data communication devices;
generating reply messages at the mobile data communication devices to be sent to a plurality of message senders and transmitting the reply messages to the message server;
receiving the reply messages at the message server and configuring address information of the reply messages such that the reply messages use an address associated with an associated

desktop system as the originating address, wherein messages generated at either the desktop systems or the mobile data communication devices share the address; and

transmitting the reply messages from the message server to the plurality of message senders.

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3. The method of claim 1, wherein the user profile for each desktop system includes configuration information describing the capabilities of the associated mobile data communication device.

4. The method of claim 3, wherein the configuration information includes:

(A) the network address of the mobile data communication device; and

(B) an indication of the types of message attachments that the mobile data communication device can receive and process.

5. The method of claim 4, wherein the configuration information further includes:

(C) an indication of the type of mobile data communication device.

6. The method of claim 1, wherein the plurality of received messages are addressed using a sender address and a receiver address, the method further comprising the steps of:

determining whether the receiver address is associated with one of the desktop systems;

if the receiver address is associated with one of the desktop systems, then determining a network address of the associated mobile data communication device and repackaging the

messages into electronic envelopes addressed using the receiver address and the network address of the mobile data communication device; and

after receiving the redirected messages at the mobile data communication device, extracting the messages from the electronic envelopes and displaying the messages at the mobile data communication device using the sender address and the receiver address, so that it appears as though the mobile data communication device is the desktop system.

7. The method of claim 4, further comprising the steps of:

for each message to be redirected, the message server determining whether the message includes an attachment, and if so then determining the type of attachment;

accessing the configuration information to determine whether the mobile data communication device can receive and process attachments of the determined type; and

if so, then redirecting the attachments to the mobile data communication device, and if not, then redirecting the attachments to a device that is capable of processing the attachment.

8. The method of claim 7, wherein the type of attachment is a sound file.

9. The method of claim 1, wherein the redirection events include external events, internal events, or networked events.

10. The method of claim 9, wherein the external event is a message from the mobile data communication device to start redirection.

11. The method of claim 9, wherein the internal event is a calendar alarm.

12. The method of claim 9, wherein the internal event is a screen saver activation.

13. The method of claim 9, wherein the internal event is a keyboard timeout signal.

14. The method of claim 9, wherein the networked events include messages to begin redirection from computer systems other than the mobile data communication device, which are connected to the message server via a wired network.

15. The method of claim 1, wherein the mobile data communication device is a device selected from the group consisting of hand-held wireless paging computer, a wirelessly enabled palm-top computer, a mobile telephone with data message capabilities, and a wirelessly enabled laptop computer.

16. The method of claim 1, wherein the mobile data communication device is a device equipped to receive both voice and non-voice data messages.

17. The method of claim 1, wherein the message server includes a preferred list associated with at least one desktop system for limiting the redirection step to redirecting only those messages that are from a sender on the preferred list.

18. The method of claim 17, wherein a user can add and subtract senders from the preferred list.

19. The method of claim 17, wherein the preferred list is activated and deactivated at the host system.

5 20. The method of claim 17, wherein the preferred list is activated and deactivated by a command message transmitted from the mobile data communication device to the host system.

21. The method of claim 18, wherein the user can add and subtract senders from the preferred list by configuring the message server.

22. The method of claim 18, wherein the user can add and subtract senders from the preferred list by transmitting a command message from the mobile data communication device to the message server.

23. A server-based email redirection system operable with a plurality of desktop systems and a plurality of wireless communication devices, comprising:

a user profile for associating the desktop systems with the wireless communication devices, wherein the user profile includes a list of common email addresses, each common email address associated with one desktop system and one wireless communication device;

20 a redirector component that receives email messages addressed to one of the common email addresses and forwards the email messages to the associated wireless communication device, and receives reply email messages generated at the mobile device and forwards the reply

email messages to respective email message recipients using the common email address as an originating email address.

5 24. An email redirection system operable with one or more wireless communication devices, comprising:

an email system operating at a server, the email system having one or more user email accounts, each user email account being associated with a wireless communication device and uniquely identified by an email address; and

a redirector component coupled to the email system, comprising:

means for redirecting email received by the email system to the one or more wireless communication devices associated with the user accounts; and

means for redirecting reply messages generated at the wireless communication devices and received at the email system using the email addresses associated with the users' email accounts.

20 25. A method of exchanging messages between a host system and one or more wireless communication devices, comprising the steps of:

registering for notifications of changes to a primary store in the host system;

receiving a message at the primary store;

generating a notification that the primary store has changed;

detecting the message in the primary store by receiving the notification;

preparing the message for redirection by packaging the message into an electronic envelope; and

sending the packaged message to a wireless communication device.

26. The method of claim 25, further comprising the steps of:

receiving the packaged new message on the wireless communication device;

unpackaging the new message from the packaged new message; and,

storing the new message at a secondary store in the wireless communication device.

27. The method of claim 25, wherein the generating a notification step further comprises the steps of:

providing a user profile at the host system, the user profile including an indication of whether a particular user is associated with a wireless communication device; and

generating a notification that the primary store has changed only for those users that the user profile indicates are associated with a wireless communication device.

28. The method of claim 25, further comprising the steps of:

providing a message server coupled to the primary store, wherein the message server is Microsoft Exchange Server.

29. The method of claim 28, wherein the notifications are advise syncs.

30. A method of redirecting messages between a message server operating at a host system and at least one mobile communication device, comprising the steps of:

(A) detecting a redirection event at the host system;

(B) in response to the redirection event, switching the message server between a redirection mode and a non-redirection mode;

(C) if the message server is in the redirection mode, then:

(C)(1) receiving a first set of messages at the host system directed to an electronic address associated with the message server and storing the first set of received messages in a primary memory store;

(C)(2) redirecting the first set of received messages from the primary memory store to the mobile communication device; and

(C)(3) storing the first set of received messages in a secondary store within the mobile communication device; and

(D) if the message server is in the non-redirection mode, then:

(D)(1) receiving a second set of messages at the host system directed to an electronic address associated with the message server; and

(D)(2) storing the second set of received messages in the primary memory store.

31. A wireless information system operable with one or more wireless communication devices, comprising:

a first system operating at the a server for centrally managing information, the system having one or more user accounts, each user account being associated with a wireless communication device and uniquely identified by an account address; and

a second system cooperating with the information exchange system, comprising:

means for sending information prepared for wireless transmission to the one or more wireless communication devices associated with the user accounts; and,

means for receiving information generated at the wireless communication devices and cooperating with the first system to store the received information at data stores associated with the user accounts.

32. A method to enable a message server to exchange data items between one or more wireless communication devices, comprising the steps of:

providing the message server having one or more user accounts;

providing a user profile for associating each user account with a wireless communication device; and,

providing a wireless enabling component that cooperates with the message server to receive data items addressed to the one or more user accounts and forwards the data items to the associated wireless communication device, and that receives data items generated at the mobile device and provides the received data items to the message server for storage in association with the user accounts.

33. A method of exchanging messages between a message server and a plurality of wireless mobile communication devices, comprising the steps of:

providing a wireless message handling component that is coupled to and cooperates with the message server;

providing a plurality of networked computer systems in communication with the message server via a network;

providing a user profile for each of the plurality of networked computer systems, wherein the user profiles each associate a particular networked computer system with a particular wireless mobile communication device;

configuring the networked computer systems to detect one or more wireless activation events and one or more wireless deactivation events;

if at least one wireless activation event is detected and such detection is for a particular wireless mobile communication device user, then for that user: exchanging data items, associated with the user, between the message server and a wireless mobile communication device via a wireless communication network so that the user can at least receive data items wirelessly from the message server until at least one wireless deactivation event is detected.

34. A system for replicating information between an information server and a plurality of wireless mobile communication devices associated with a plurality of mobile users, comprising:

an information account for each mobile user, the information account being coupled to the information server and associated with at least one of the plurality of wireless mobile

communication devices, wherein the information account stores e-mail messages, calendar information, and contact information for a particular mobile user; and

a replication component, coupled to the information server, which detects a new or updated e-mail message, calendar information or contact information, and replicates information between the information account and the mobile user's mobile communication device via a wireless network in order to provide the new or updated e-mail message, calendar information or contact information at the mobile communication device.

35. A method for securely replicating data between a server and a plurality of wireless mobile communication devices, comprising the steps of:

providing a data account for each of a plurality of users at the server, wherein each data account is associated with at least one wireless mobile communication device;

storing e-mail messages, calendar information and contact information in each of the data accounts;

establishing an end-to-end secure link between the server and the plurality of wireless mobile communication devices; and

replicating the e-mail messages, the calendar information, and the contact information between the data accounts and the plurality of wireless mobile communication devices via the secure link.

36. The method of claim 35, further comprising the steps of:

providing a wireless network over which the end-to-end secure links are established between the server and the plurality of wireless mobile communication devices, wherein the

wireless network includes a plurality of wireless base stations that generate a plurality of coverage areas within a certain geographic region; and

storing the e-mail messages, calendar information, and contact information at the data account and executing the replicating step only when a wireless communication device is within one of the coverage areas.

37. The method of claim 35, further comprising the steps of:

providing one or more filters associated with each data account; and

applying the one or more filters to e-mail messages, calendar information or contact information stored in one of the data accounts such that only e-mail messages, calendar information or contact information that pass through the filter are replicated to the wireless mobile communication device.

38. The method of claim 37, wherein one of the one or more filters is a preferred list of senders that only permits e-mail messages sent from a sender on the preferred list to pass through the filter.

39. The method of claim 37, wherein one of the one or more filters is an urgency filter that only permits e-mail messages of a predetermined urgency level to pass through the filter.

40. The method of claim 35, wherein the plurality of wireless mobile communication devices include at least one mobile phone, and at least one personal digital assistant.

41. The method of claim 41, wherein the plurality of wireless mobile communication devices further include at least one two-way pager.

42. The method of claim 35, wherein the data accounts are associated with a message server application operating in conjunction with the server.

43. The method of claim 42, wherein the message server application is Microsoft Exchange Server.

44. The method of claim 34, further comprising the steps of:

detecting at least one attachment associated with an e-mail message stored at one of the data accounts; and

receiving a command message from the wireless mobile communication device associated with the one data account that instructs the server where to forward the attachment.

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